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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,005	11/29/2000	Ulf Mattsson	0104-0311P	8546
26161	7590	10/12/2005	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			SHIFERAW, ELENI A	
			ART UNIT	PAPER NUMBER
			2136	
DATE MAILED: 10/12/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/725,005

Applicant(s)

MATTSSON ET AL.

Examiner

Eleni A. Shiferaw

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-7 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Final Rejection**

**Response to the applicant amendments**

1. Applicant's amendment/argument with respect to amended claims 1-6, added claim 7, and presently pending claims 1-7 filed on August 4, 2005 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichihara (U.S. Patent 6,496,937) in view of Arlein et al. (Arlein, Patent No.: US 6,594,656 B1), and Robusto et al. (Robusto, US 5,572,652).

As per claim 1, Ichihara teaches a method for which a database at least comprises one table with at least one user password, which password is used to permit a user to log on to said database, wherein said password is stored as a hash value, said method comprising the steps of:

adding a trigger (date and time) to said table, said trigger at least triggering an action (generating password) through a database (Col. 6 lines 15-45, and Figures 3,6);

calculating a new password hash value differing from said stored password hash value when said trigger is triggered (col. 2 lines 33-41, col. 3 lines 55-66, col.6 lines 15-45, and Fig. 3);

replacing said stored password hash value with said new password hash value. (Col. 4 lines 14-21, and col. 8 line 49-53);

Ichihara fails to teach adding a trigger to the table when an administrator alters said table through a database management system (DBMS).

However, Arlein teaches adding a trigger to the table when an administrator alters said table through a database management system (DBMS) (Arlein Col. 3 lines 43-col. 4 lines 67, and col. 1 lines 19-33).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Arlein within the system of Ichihara to prevent an administrator to impersonate a user of a relational database and trigger when an administrator alters said table through a database management system (DBMS) because it would provide an improved technique for locally adding trigger processing to database system so that appropriate action will be taken according to the trigger action.

Ichihara and Arlein disclose all the subject matter as described above. Ichihara and Arlein fail to explicitly teach disabling a user from logging on to said database when replacing said stored password hash value with said new password hash value.

However Robusto discloses replacing said stored password hash value with said new password hash value, such that said user is disabled from logging on to said database (Robusto col. 10 lines 53-56; password is changed and user/unauthorized user is disabled from logging...).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to employ the teachings of Robusto within the combination system of Ichihara and Arlein because it is well known to update a password to prevent a user from accessing the system and enhance security. One skilled in the art would have been motivated to modify the teachings of Robust within the combination system because it would enhance security by preventing access to the password owner so that the password owner would know his password has been altered by administrator.

As to claim 6, it has similar limitations as claim 1; therefore, it is being rejected under the same rationale.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ichihara (U.S. Patent 6,496,937), Arlein et al. (Arlein, Patent No.: US 6,594,656 B1), and Robusto et al. (Robusto, US 5,572,652) and further in view of Leighton et al. (Leighton, Patent No. 4,995,081).

As per claim 2, Ichihara teaches comparing said check value at the startup and at regular intervals with a recalculated check value. (Col. 6 lines 16-28; monitor when predetermined number of elapsed dates and time measured by the timer);

Ichihara and Arlein teach the invention as discussed above. However, Ichihara, Arlein, and Robusto do not explicitly teach calculating a check value of said trigger.

Leighton teaches that hash function that being used to calculate a value is well-known (col. 5 line 57- col. 6 line10).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Ichihara, Arlein, Leighton, and Robusto to use hash function to calculate a check value of said trigger because it would prevent unauthorized use during transaction processing.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichihara (U.S. Patent 6,496,937) in view of Arlein et al. (Arlein, Patent No.: US 6,594,656 B1), and Robusto et al. (Robusto, US 5,572,652) and further in view of Heinrich et al. (Heinrich, US 6,510,522 B1).

As per claim 3, Ichihara, Arlein, and Robusto teach all the subject matter as described above.

Ichihara, Arlein, and Robusto do not teach comparing for each active user having access to sensitive data, the hash value of the current login password with the hash value of the currently stored password;

However, Heinrich discloses comparing for each active user having access to sensitive data, the hash value of the current login password with the hash value of the currently stored password (Heinrich Col. 3 lines 17-21, and col. 7 lines 1-11)

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Heinrich within the combination system of Ichihara, Arlein, and Robusto because it prevent unwarranted users from changing that password and thereby gaining access to critical information (Heinrich Col. 7 lines 1-11).

As per claim 4, Ichihara, Arlein, Robusto and Heinrich teach comparing is performed when said user changes said database (Ichihara, col. 5 line 56 - col. 6 line 52).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ichihara (U.S. Patent 6,496,937), in view of Arlein et al. (Arlein, Patent No.: US 6,594,656 B1), and Robusto et al. (Robusto, US 5,572,652) and further in view of Geary (U.S. Patent 6,070,160).

As per claim 5, Ichihara and Arlein teach the invention as discussed above. However, Ichihara, Arlein and Robusto do not explicitly teach means for reading a log of actions on said database, means for identifying commands for altering user passwords in said log and means for identifying which user passwords have been changed.

Geary teaches security routine that provides passwords, change passwords, control deletions from the system, perform audits, add and delete users, review logs (Col. 14 lines 1-11, and Figs. 2 and 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Ichihara, Arlein, Robusto and Geary to read a log of actions on said database, to identify commands for altering user passwords in said log and

which user passwords that have been changed because it would enhance overall computer security.

As per claim 7 Ichihara, Arlein, Leighton, and Robusto teach all the subject matter as described above. In addition, Leighton teaches wherein the check value is a hash value (col. 5 line 57- col. 6 line10). The rationale for combining are the same as claim 2 above.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McCaughan et al. US 6,173,282 B1; *whenever a user accesses restricted file trigger is triggered to change the codeword that is only known by the owner of the smart card so that the owner of the smart card would know the restricted file has been accessed/alterd. And the changed codeword is not accessible by the owner of the smart card unless he decrypts the encrypted codeword.*

Nova et al. (US 6,636,973 B1); *by frequently updating password security is enhanced and unauthorized user access is prevented.*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO



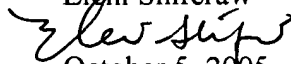
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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni A Shiferaw whose telephone number is 571-272-3867. The examiner can normally be reached on Mon-Fri 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eleni Shiferaw  
  
October 5, 2005

  
Primary Examiner  
AU2131  
10/9/05

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